

APPENDIX:

The Appendix includes the following item(s):

- ☒ - a new or amended Abstract of the Disclosure
- ☐ - a Replacement Sheet for Figure of the drawings
- ☐ - a Substitute Specification and a marked-up copy of the originally-filed specification
- ☐ - a terminal disclaimer
- ☐ - a 37 CFR 1.132 Declaration
- ☐ - a Substitute Specification and a marked-up copy of the originally-filed specification
- ☐ - a verified English translation of foreign priority document

ABSTRACT

A magnetic field generated by a primary winding (1) in which the current (i_1) to be measured flows is balanced by a magnetic field of opposing direction generated by a secondary winding (2) in which a compensating current (i_2) flows. The device includes a member (3) sensitive to the field resulting from the addition of the magnetic fields of opposing directions to regulate the compensating current (i_2) in closed loop mode. According to the invention, the sensitive member (3) is sensitive only to the direction of the resultant field and, in return, controls the reversal of the direction of circulation of the compensating current (i_2) in the secondary winding (2). This sensitive member (3) can be formed by a Hall effect probe with bipolar output signal. The device is suitable for the measurement of a current in automotive electronics.